TABLE I	Nr	% or SD
Male	9	50%
Mean Age (years)	81	7
Peripheral Vasculopathy	18	100%
Diabetes	3	16%
ReDo	4	22%
Chronic Renal Failure	10	55%
Peak Ao Δ (mmHg)	92	23
Left Ventricular Ejection Fraction	57	11%
Euroscore Logistic	11	3
STS Mortality	11	6%
Implant Time (min)	160	90
Post-implant Ao insuff ≤ 1	16	89%
PM implant	3	16%
Hospital Stay (days)	11	4

Conclusion: TAVI with direct aortic approach seems safe and feasible also in redo patients offering a new attractive option to treat selected high-risk patients with severe aortic stenosis and peripheral vasculopathy, and emerged as a valuable alternative to trans-apical procedures

TCT-784

Multi-Slice Computed Tomography: a New Gold Standard for Valve Sizing and Prevention of Aortic Regurgitation in Patients Referred forTranscatheter Aortic Valve Implantation?

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Background: Moderate to massive aortic regurgitation (AR) is occurring in 30% of cases after TAVI. Pre-procedural assessment of aortic annulus diameter is key for appropriate sizing of the prosthesis and prevention of AR. Transoesophageal echocardiography (TEE) is currently the method of choice in this setting. The value of multi-slice computed tomography (MSCT) is unknown.
Methods: In 70 consecutive patients, implantation of the SAPIEN XT prosthesis was performed using TEE as recommended: 1) When annulus was > 24.5mm the procedure was not performed; 2) The cut-off point of 21.5m was used to choose between a 23mm or a 26mm prosthesis. Annulus diameter by MSCT was measured in all patients pre-procedural. For each modality, TEE and MSCT, the "sizing index" was defined as the ratio "prosthesis diameter/annulus diameter". Aortic regurgitation was evaluated by echocardiography performed at discharge and graded as: 0=none/trace, 1=mild, 2=moderate, 3=severe and 4=massive.
Results: Moderate-to-massive AR was observed in 20/70 (28%) patients, including 6/70 (8.5%) with a severe/massive AR. Annulus diameter was significantly larger by MSCT than by TEE (25.3±2.7vs 22.4±1.9, p=0.001). A significant but weak correlation was found between these 2 measurements (r=0.42; p=0.001). No significant correlation was found between annulus diameter by TEE and the degree of AR or between the "sizing index" by TEE and AR. A significant and inverse correlation was found between annulus diameter by MSCT and the degree of AR (R=0.51; p=0.001). The inverse correlation between the "sizing index" by MSCT and AR was higher (R=0.62; p=0.0001). In the 17 patients with a "sizing index" by MSCT≤1; 6 had a moderate AR (35%) and 6 had a severe/massive AR (35%). In the 53 patients with a "sizing index" by MSCT >1; 8 had a moderate AR (15%) and none had severe/massive AR (0%). The difference was highly significant (p=0.0001).
Conclusion: Once patients with a very large annulus by TEE (>24.5mm) have been excluded, TEE is of no use to predict AR after TAVI. By contrast MSCT has a good ability to predict such complication. In addition our analysis suggests that a simple approach of choosing a prosthesis diameter > annulus diameter by MSCT should eliminate the risk of severe/massive AR and drastically reduce the risk of moderate AR.

TCT-785

Is 'Porcelain Aorta' a real Contraindication for Transaortic Transcatheter Aortic Valve Replacement?

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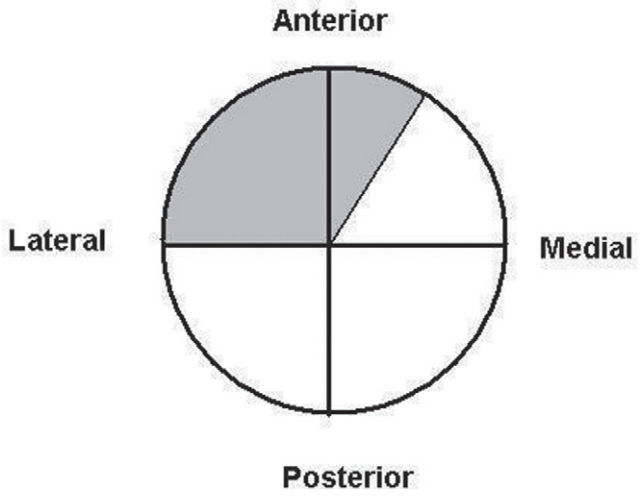
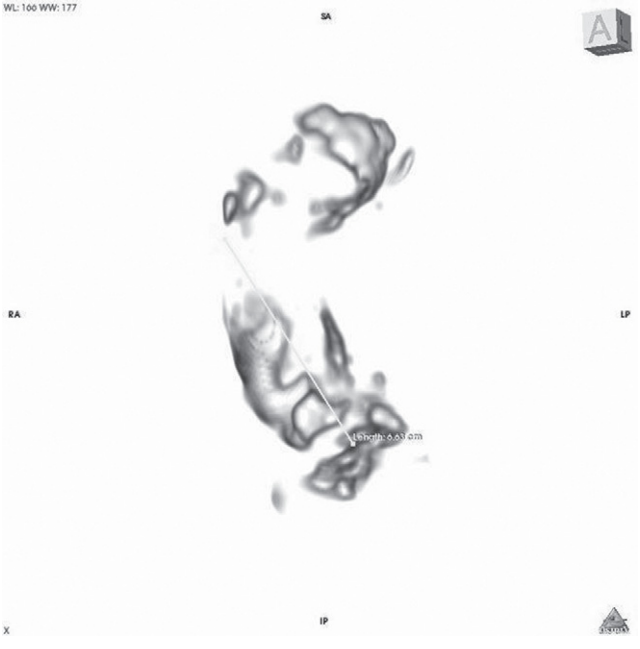
Background: Tansaortic (TAo) approach is another emerging approach for implantation of the Edwards Sapien transcatheter valve through a partial upper sternotomy. 'Porcelain aorta' is often considered a contraindication for this approach. TAo procedure requires a relatively small calcium free area in the distal ascending aorta ≥5 centimeters from the aortic annulus-'TAo zone' (Figure 1). Hence conventional definition of 'Porcelain aorta' may not apply to TAo approach.
Methods: 212 patients (11 Porcelain aorta) underwent TAVR in our institution till June 2011. The CT scans were retrospectively analyzed with 3-D reconstruction for distribution of calcium in the ascending aorta using FDA approved Osirix software with special attention to the 'TAo zone' (Figure 2).
Results: 211 Patients including 10 Porcelain aorta patients had a calcium free 'TAo zone' in the ascending aorta. Only one patient with diffuse distribution of calcium would be a contraindication for this procedure.3/10 underwent TAo procedure with no TIA or stroke postoperatively. 3-D reconstruction data correlated very well with the operative findings.



'TAo Zone' in the distal ascending aorta



3-D reconstruction demonstrates 'TAo zone' free of calcium in a patient identified as porcelain aorta

Conclusion: Conventional definition of Porcelain aorta should not be considered a contraindication for performing a Transaortic procedure.

TCT-786

Beyond the short-term: Clinical Outcome and Valve Performance Two Years after Transcatheter Aortic Valve Implantation in 227 Patients

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Background: Though procedural feasibility of transcatheter aortic valve implantation (TAVI) has been shown by multiple groups, longer-term data are rare. We report on two-year-follow-up clinical and echocardiographic results after TAVI in 227 patients.
Methods: Of 580 non-surgical candidates who underwent TAVI for symptomatic high-grade aortic stenosis, 227 have completed two-year-follow-up. Mean age was 81±7y, 59% were female, mean EuroScore and mean STS score were 21±14% and 7±5%, and

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